

CLAIMS

1. (Previously presented) A cordless telephone, comprising:
 - a remote handset;
 - a base unit matched to said remote handset;
 - an MPEG audio player integrated within at least one of said remote handset and said base unit;and
a summer adapted to digitally sum a digitally synthesized ring tone with an MPEG audio bit stream to allow a user of said cordless telephone to hear said cordless telephone ringing along with music.
2. (Previously presented) The cordless telephone according to claim 1, wherein:
said MPEG audio player is integrated within said remote handset.
3. (Canceled).
4. (Previously presented) The cordless telephone according to claim 1, wherein:
said MPEG audio player is an MP3 player.
5. (Previously presented) The cordless telephone according to claim 2, wherein:
said MPEG audio player is an MP3 player.

6-8. (Canceled)

9. (Previously presented) A method of integrating an MPEG audio player in a cordless telephone, comprising:
 - connecting a base unit of said cordless telephone to a public switched telephone network (PSTN);
 - playing pre-loaded MP3 music from a remote handset of said cordless telephone;
 - digitally summing a digitally synthesized ring tone with an MPEG audio bit stream to allow a user of said cordless telephone to hear said cordless telephone ringing along with music; and
 - muting said playing of said pre-loaded MP3 music by an action initiated by a user of said cordless telephone when said cordless telephone receives a telephone call.
10. (Original) The method of integrating an MPEG audio player in a cordless telephone according to claim 9, wherein:
said muting pauses said playing of said pre-loaded MP3 music.

11-18. (canceled)

19. (Previously presented) Apparatus for integrating an MPEG audio player in a cordless telephone, comprising:

means for playing pre-loaded MP3 music from a remote handset of a cordless telephone;

means for connecting a base unit of said cordless telephone to a public switched telephone network (PSTN);

means for digitally summing a digitally synthesized ring tone with an MP3 audio bit stream to allow a user of said cordless telephone to hear said cordless telephone ringing along with music; and

means for muting said playing of said pre-loaded MP3 music by an action initiated by a user of said cordless telephone when said cordless telephone receives a telephone call.

20. (Previously presented) The apparatus for integrating an MPEG audio player in a cordless telephone according to claim 19, wherein:

said means for muting pauses said playing of said pre-loaded MP3 music.

21-29. (Cancelled)

30. (Currently amended) The cordless telephone according to claim 1, wherein:

said base unit is adapted (i) to receive from a telephone line a telephone audio signal from a telephone line representing a telephone conversation and (ii) to transmit the telephone audio signal to said remote handset; and

said summer is further adapted to digitally sum the telephone audio signal representing the telephone conversation with the MPEG audio bit stream.

31. (Previously presented) The cordless telephone according to claim 30, wherein:

the telephone audio signal is monaural;

the MPEG audio bit stream has a plurality of stereo channels; and

the summer is adapted to digitally sum the monaural telephone audio signal into each of the plurality of stereo channels of the MPEG audio bit stream, such that a sense of balance in the user is improved.

32. (Previously presented) The cordless telephone according to claim 30, wherein:

both said MPEG audio player and said summer are jointly implemented as a single digital signal processor adapted to digitally sum the digitally synthesized ring tone with the MPEG audio bit stream.

33. (Previously presented) The cordless telephone according to claim 32, wherein:

the digital signal processor is adapted to digitally sum the digitally synthesized ring tone with the MPEG audio bit stream by: (i) decoding the MPEG audio bit stream to produce a digital reconstructed audio signal, and (ii) digitally summing the digital reconstructed audio signal with the digitally synthesized ring tone to produce a digital summed audio signal.

34. (Currently amended) The cordless telephone according to claim 30, wherein the cordless telephone further comprises:

a digital-to-analog converter connected to said digital signal processor to receive the digital summed audio signal and to produce an analog audio signal suitable for outputting to the user.

35. (Currently amended) The method according to claim 9, further comprising:

the base unit receiving from the PSTN a telephone audio signal from the PSTN representing a telephone conversation;

the base unit transmitting the telephone audio signal to the remote handset; and

the remote handset digitally summing the telephone audio signal representing the telephone conversation with the MPEG audio bit stream.

36. (Previously presented) The method according to claim 35, wherein:

the telephone audio signal is monaural; and

the MPEG audio bit stream has a plurality of stereo channels; and

the step of digitally summing the telephone audio signal with the MPEG audio bit stream comprises digitally summing the monaural telephone audio signal into each of the plurality of stereo channels of the MPEG audio bit stream, such that a sense of balance in the user is improved.

37. (Previously presented) The method according to claim 35, wherein:

the steps of (i) playing pre-loaded MP3 music from the remote handset of said cordless telephone and (ii) digitally summing the telephone audio signal with the MPEG audio bit stream are performed by a single digital signal processor.

38. (Currently amended) The method according to claim ~~32~~³⁷, wherein:

the step of digitally summing the digitally synthesized ring tone with the MPEG audio bit stream comprises:

the digital signal processor decoding the MPEG audio bit stream to produce a digital reconstructed audio signal, and

the digital signal processor digitally summing the digital reconstructed audio signal with the digitally synthesized ring tone to produce a digital summed audio signal.

39. (Previously presented) The method according to claim 38, further comprising:

digital-to-analog converting the digital summed audio signal to produce an analog audio signal suitable for outputting to the user.